

Claims

1.-10. (cancelled)

11. (new) A method for recognizing reductions in an expected service capacity in a communication network, comprising:

storing information relating to functional properties and topological arrangement of network elements relevant to the provision of a service in a network element database and assigning the information to the service, on establishment and/or modification of the service;

providing the information stored in the network element database for a service quality and/or error monitoring device;

comparing recorded measured values to the information stored in the network element database by the service quality and/or error monitoring device regarding inadmissible deviations; and

generating a message about a reduction in the expected service capacity in the event of an inadmissible deviation

12. (new) The method according to Claim 11, further comprising:

storing information relating to network elements specified as relevant to the provision of the service with regard to a service level agreement in the network element database; and

recording measured values relating to the network elements specified as relevant to the provision of the service with regard to the service level agreement.

13. (new) The method according to Claim 11, wherein the message contains a statement about service quality and/or service availability.

14. (new) The method according to Claim 12, wherein the message contains a statement about service quality and/or service availability.

15. (new) The method according to Claim 11, wherein the message about a reduction in service capacity is transmitted to a network

control system for rectification of the reduction in service capacity.

16. (new) The method according to Claim 12, wherein the message about a reduction in service capacity is transmitted to a network control system for rectification of the reduction in service capacity.

17. (new) The method according to Claim 13, wherein the message about a reduction in service capacity is transmitted to a network control system for rectification of the reduction in service capacity.

18. (new) The method according to Claim 11, wherein the information stored in the network element database describes admissible operating ranges of the network elements.

19. (new) The method according to Claim 12, wherein the information stored in the network element database describes admissible operating ranges of the network elements.

20. (new) The method according to Claim 13, wherein the information stored in the network element database describes admissible operating ranges of the network elements.

21. (new) The method according to Claim 15, wherein the information stored in the network element database describes admissible operating ranges of the network elements.

22. (new) The method according to Claim 11, wherein on the establishment, modification and/or deletion of a service, network elements affected by the establishment, modification and/or deletion are configured by a network control system accessing the information stored in the network element database.

23. (new) The method according to Claim 12, wherein on the establishment, modification and/or deletion of a service, network elements affected by the establishment, modification and/or deletion are configured by a network control system accessing the information stored in the network element database.

24. (new) The method according to Claim 13, wherein on the establishment, modification and/or deletion of a service, network elements affected by the establishment, modification and/or deletion are configured by a network control system accessing the information stored in the network element database.

25. (new) The method according to Claim 15, wherein on the establishment, modification and/or deletion of a service, network elements affected by the establishment, modification and/or deletion are configured by a network control system accessing the information stored in the network element database.

26. (new) The method according to Claim 11, wherein on the establishment and/or modification of the service a recording of measured values relating to network elements specified by the service level agreement as relevant to provision of the service is initiated.

27. (new) The method according to Claim 12, wherein on the establishment and/or modification of the service a recording of measured values relating to network elements specified by the service level agreement as relevant to provision of the service is initiated.

28. (new) A communication network control and monitoring system, comprising:

- a service providing device for establishing and/or modifying a service;

- a communication connection management device for storing information relating to the functional properties and topological arrangement of network elements relevant to provision of the service

in a network element database assigned to the communication connection management device, for assigning this information to the service and for providing the information stored in the network element database to a service quality and/or error monitoring device; and

a service quality and/or error monitoring device for comparing recorded measured values with the information stored in the network element database for inadmissible deviations and, in the event of an inadmissible deviation, for generating a message about a reduction in service capacity giving details of the service concerned.

29. (new) The communication network control and monitoring system according to claim 28, further comprising a control program for the communication connection management device, wherein

the control program is loadable into a working memory of a data processing system assigned to the communication connection management device and having at least one code section, on execution of which

on the establishment and/or modification of a service, information relating to the functional properties and topological arrangement of network elements relevant to provision of the service is stored in a network element database and assigned to the service, and

the information stored in the network element database is provided to a service quality and/or error monitoring device, when the computer program is running in the data processing system.

30. (new) The communication network control and monitoring system according to claim 28, further comprising a control program for the service quality and/or error monitoring device, wherein

the control program being loadable into a working memory of a data processing system assigned to the service quality and/or error monitoring device and having at least one code section, on execution of which

recorded measured values are compared with information relating to the functional properties and topological arrangement of network

elements relevant to provision of a service, said information being stored in a network element database, for inadmissible deviations, and

in the event of an inadmissible deviation, a message is generated about a reduction in service capacity, giving details of the service concerned, when the computer program is running in the data processing system.